SEQUENCE LISTING

<110> Ness, Jon
Mark Welch
Giver, Lorraine
Cherry, Joel
Borchert, Torben
Stemmer, Willem
Minshull, Jeremy

<120> Subtilisin Variants

<130> 10181.210-US

<160> 201

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gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

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tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

atctatggct actccacatg tcgccggcgt cgccgcacta gt 522

<210> 24
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 24
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caattcaata ggcgtactgg gtgtcgcacc gaatgcagaa ttatatgcag ttaaagtact 120

tggtgcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttctggt tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac 360

tgaccaaaac aacaaccgcg ctagcttttc acagtatgga gctgggcttg acattgtcgc 420

gccaggtgtc aatgtgcaga gcacataccc aggttcaaca tatgacagct taagtggcac 480

ttcaatggca acgcctcacg tcgccggcgt cgccgcacta gt 522

<210> 25
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 25
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tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttccggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc gggaggtcaa tacgctgagc taagcggaac 480

ctcaatggcc tcaccacacg tcgccggcgc cgccgcacta gt 522

<210> 26
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 26
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caattcaata ggcgtacttg gtgttgcacc gaatgcagaa ttatatgctg ttaaagtact 120

tggagcaagt ggttctggat caatcagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttccggt tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt gaaattgaaa gcacctaccc aggaagctct tatgacagct taagaggcac 480

ttcaatggca acgcctcacg tcgccggcgc cgccgcacta gt 522

<210> 27
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 27
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taatgacgaa ggtgttgttg gcgtagcgcc aaatgcggat ctatacgctg taaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

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cggttccggt tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

atctatggct actccacatg tcgccggcgt cgccgcacta gt 522

<210> 28
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 28
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caattcagta ggcgtactgg gtgtcgcacc gaatgcagat ctatacgctg taaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttctggt tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acattgttgc 420

acctggcgtt ggcgttcaga gcacataccc aggtaaccgt tatgcaagct taagtggtac 480

gtcaatggcc tctccgcacg tcgccggcgt cgccgcgcta gt 522

<210> 29
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 29
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caattcaata ggcgtacttg gtgttgcacc gaatgcagaa ttatatgctg ttaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttaa 240

gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttccggt tcagtaggct atcctgctcg ttatgccaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

atctatggct actcctcatg ttgcaggtgc ggccgcacta gt 522

<210> 30
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 30
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taattcaatc ggtgtgattg gtgtggcacc gaatgctgac ttatatgctg ttaaagtact 120

cggagcaaat ggaagcggaa gtgtaagtgg gattgctcga ggtttagagt gggcggcaac 180

caataacatg catattgcga acatgagtct cggtagtgat tttcctagct ctacacttga 240

gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttctggt tcagttggct atcctgctcg ttatgccaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

ttcaatggca actcctcacg tcgccggcgt cgccgcacta gt 522

<210> 31
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 31
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taactcaatc ggtgtgattg gtgtggcacc aagtgctgat ctatacgctg taaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactatgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttctggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

atctatggca actcctcacg tcgccggcgt cgccgcacta gt 522

<210> 32
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 32
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taacgatgaa ggcgttgttg gcgtagcacc aaatgccgat ctttacgcag ttaaggtgct 120

tagcgcatct ggtgccggtt cgattagctc aattgcccaa gggcttgaat ggtctggcga 180

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acaagctgtt aacgcagcga catctcgtgg tgtacttgtt atcgcagcct ctggtaattc 300

tggtgctgga tcagttggtt atcctgcacg ttacgcgaat gcgatggcag taggtgcaac 360

tgatcaaaat aacaaccgtg caagcttctc tcaatacggt gcaggtcttg atattgtcgc 420

tcctggcgta ggtgttcaaa gcacataccc aggttcaaca tatgccagct taaacggtac 480

atcgatggct actcctcacg tcgccggcgt cgccgcacta gt 522

<210> 33
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 33
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caataatgtt ggtgtacttg gtgttgcgcc taacgttgag ctttatggtg ttaaagtact 120

tggagcaagt ggttctggat caatcagtgg aattgcacaa gggttgcaat gggctggtaa 180

taatggaatg catatagcta atatgagcct tggtacttct gcaccaagcg caactcttga 240

acaagctgtt aacgcagcga catctcgtgg tgtacttgtt atcgcagcct ctggtaattc 300

tggtgctgga tcagttggtt atcctgcacg ttacgcgaat gcgatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

acctggagtt aacgtacaaa gtacgtatcc aggaaaccgt tatgtgagta tgaatggtac 480

atctatggcc actccacacg tcgccggcgt cgccgcacta gt 522

<210> 34
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 34
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taattcaatc ggtgtgattg gtgtggcacc aagtgctgat ctatacgctg taaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttccggt tcagttggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

atctatggct actccacacg tcgccggcgt cgccgcacta gt 522

<210> 35
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 35
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taattcaatc ggtgtgattg gtgtggcacc aagtgctgat ctatacgctg taaaagtact 120

tggagcaaat ggtagaggaa gcgttagtgg aattgctcaa ggtctagagt gggctgcagc 180

gaataacatg catattgcta acatgagtct cggtagtgat gcacctagta ctacacttga 240

gcgtgcagtc aactacgcga caagccaagg tgtactagtt attgcagcga ctggtaacaa 300

cggttccggt tcagtaggct atcctgctcg ttatgcaaac gcaatggctg taggagcgac 360

tgaccaaaac aacagacgtg caaacttttc tcagtatggt acaggaattg acatcgtagc 420

accaggggtt aatgtacaaa gtacgtatcc tggaaaccgc tatgcaagtt taaatggtac 480

ttcaatggca actcctcacg tcgccggcgt cgccgcacta gt 522

<210> 36
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 36
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taataacgat ggcgttcttg gcgttgcacc gaacgttgat ctgtatgcag ttaaagttct 120

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cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caaacttttc acaatatggc gcaggcattg atattgttgc 420

accgggcgtt aatgtccaat caacatatcc gggcaacaca tacgtttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 37
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 37
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taatagcgtt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatgcag ttaaagttct 120

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aaatggcatg catattgcaa atatgtcact gggcacatct gcaccgtcat caacactgga 240

acgggcagtt aattcagcag catcacgggg cgttctggtt gttgcagcat caggcaataa 300

cggcgcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg acattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 38
<211> 522
<212> DNA
<213> Artificial sequence

<220>
<223> Synthetic

<400> 38
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taatagcgat ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120

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taatggcatg catgttgcaa atatgtcact gggcacagat caaccgtcag caacactgga 240

acgggcagtt aatcaagcaa catcacaggg cgttctggtt attgcagcaa caggcaataa 300

cggctcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 39
<211> 522
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<213> Artificial Sequence

<220>
<223> Synthetic

<400> 39
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taataacatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120

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taatggcatg catgttgcaa atctgtcatt gggcacagat caaccgtcag caacactgga 240

acgggcagtt aatgcagcaa catcacaggg cgttctggtt attgcagcaa caggcaatag 300

cggctcaggc tcagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagctcttc acaatatggc acaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 40
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 40
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taataacatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120

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taatggcatg catattgcaa atctgtcact gggctcatct tcaccgtcag caacactgga 240

acgggcagtt aattatgcaa catcacgggg cgttctggtt attgcagcaa caggcaatac 300

cggcgcaggc acaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 41
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 41
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taatagcatt ggcgttcttg gcgttgcacc gagcgctgat ctgtatggag ttaaagttct 120

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cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acattatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcaacaca tatgcttcac tgaacggcac 480

atcaatggca accccgcatg ttgcaggcgt tgctgcacta gt 522

<210> 42
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 42
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taataacgtt ggcgttcttg gcgttgcacc gagcgttgat ctgtatgcag ttaaagttct 120

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taataatatg catgttgcaa atctgtcact gggctcatct caaccgtcat caacactgga 240

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cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 43
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 43
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taatggcatg catgttgcaa atctgtcact gggcacacct caaccgtcag caacactgga 240

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cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcg ggcagcaca tatgcctcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 44
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 44
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taatagcgtt ggcgttcttg gcgttgcacc gaacgctgat ctgtatggag ttaaagttct 120

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aaatggcatg catgttgcaa atctgtcact gggcacatct tcaccgtcat caacactgga 240

acaggcagtt aatcaagcaa catcacgggg cgttctggtt gttgcagcat caggcaatac 300

cggctcaggc acagttagct atccggcaac atatgcaaat gcaatggcag ttggcgcaac 360

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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttctc tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 45
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 45
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aaatggcatg catgttgcaa atatgtcact gggcacacct tttccgtcag caacactgga 240

acaggcagtt aaagcagcaa catcacgggg cgttctggtt gttgcagcat caggcaatag 300

cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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accgggcgtt ggcgttaaat caacatatcc gggcagcaca tatgtttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 46
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 46
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taataacgtt ggcgttcttg gcgttgcacc gagcgctgaa ctgtacgcag ttaaagttct 120

gggcgcaaac ggcagcggca cagtttcaag cattgcacag ggcctggaat gggcaggaaa 180

taatggcatg catgttgcaa atctgtcact gggcacagat caaccgtcag caacactgga 240

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cggctcaggc tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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<220>
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taatggcatg catgttgcaa atctgtcact gggctcacct tttccgtcat caacactgga 240

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cggctcaggc tcaattagct atccggcaag atatgcgaat gcaatggcag ttggcgcaac 360

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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgtctcaa tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
<223> Synthetic

<400> 48
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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
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<400> 49
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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<400> 50
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accgggcgtt ggcgttcaat cgacatatcc gggcagcaga tatgcttcaa tgagcggcac 480

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<211> 522
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<213> Artificial Sequence

<220>
<223> Synthetic

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cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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<220>
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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
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taatggcatg catgttgcaa atctgtcact gggctcagat gcaccgtcag caacactgga 240

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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
<223> Synthetic

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accgggcgtt ggcgttcaat cgacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
<223> Synthetic

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cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<223> Synthetic

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cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgtttcaa tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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accgggcgtt aatgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac 480

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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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<220>
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<220>
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<220>
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<400> 76
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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atctatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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<220>
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 81
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<220>
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<400> 81
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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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<220>
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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgaacggcac     480

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accgggcgtt ggcgttcaat caacatatcc gggcagcaga tttgcttcac tgaacggcac 480

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atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

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atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

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accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgaacggcac   480

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cggctcaggc tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aatagaagag caaactcttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgtttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 115
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 115
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taatagcatt ggcgttattg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120

gggcgcaagc ggcagaggct caatttcagg cattgcacgg ggcctggaat gggcagcaga 180

taatggcatg catgttgcaa atatgtcact gggctcacct caaccgtcag caacactgga 240

acaggcagtt aattcagcaa catcacgggg cgttctggtt attgcagcaa caggcaatag 300

cggctcaggc acaattgcct atccggcaag atatccaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc caaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgaacggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 116
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 116
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa   60

taataacgat ggcgttcttg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct   120

gggcgcaagc ggcagaggca cagtttcaag cattgcacag ggcctgctat gggcagcaaa   180

taatggcacg catgttgcaa atatgtcact gggctcatct gcaccgtcaa caacactgga   240

acgggcagtt aattatgcaa catcacgggg cgttctggtt gttgcagcat caggcaatag   300

cggctcaggc acaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac   360

agatcaaaat aataatagag caagcttttc acaatatggc gcaggcattg atattgttgc   420

accgggcgtt aatgttcaat caacatatcc gggcagcaca tatgtttcac tgagcggcac   480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt   522

<210> 117
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 117
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taatagcgtt ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct   120

gggcgcaagc ggcagaggct cagtttcagg cattgcacgg ggcctggaat gggcagcaaa   180

taatggcatg catgttgcaa atctgtcact gggctcacct gcaccgtcag caacactgga   240

acgggcagtt aattatgcaa catcacgggg cgttctggtt attgcagcat caggcaatag   300

cggcgcaggc tcagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac   360

agatcaaaat aataatagag caagcttttc acaacatggc acaggccttg atattgttgc   420

acccggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac   480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcgcta gt   522

<210> 118
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 118
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60

taatagcgtt ggcgttcttg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120

gggcgcaagc ggcagcggca caatttcagg cattgcacag ggcctggaat gggcagcaaa 180

taatggcacg catgttgcaa atctgtcact gggcacatct caaccgtcag caacactgga 240

acgggcagtt aatgcagcaa catcacaggg cgttctggtt gttgcagcaa caggcaatac 300

cggcgcaggc acaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420

accgggggtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 119
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 119
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60

taatagcatt ggcgttcttg gcgtcgcacc gagcgttgaa ctgtatgcag ttaaagttct 120

gggcgcaagc ggcagaggct caatttcaag cattgcacgg ggcctggaat gggcaggaga 180

taatggcatg catattgcaa atatgtcact gggcacagat caaccgtcag caacactgga 240

acaggcagtt aatgcagcaa catcacgggg cgttctggtt attgcagcaa caggcaatac 300

cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag cgaacttttc tcaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcaa tgaacggcac 480

atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 120
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 120

gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60

taataacgat ggcgttcttg gcgttgcacc gaacgttgat ctgtatgcag ttaaagttct 120

gggcgcaagc ggcagaggct cagtttcagg cattgcacgg ggcctggaat gggcaggagc 180

aaatggcatg catattgcaa atatgtcact gggcacatct tttccgtcag caacactgga 240

acaggcagtt aatgcagcaa catcacgggg cgttctggtt gttgcagcaa caggcaataa 300

cggcgcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagctcttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 121
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 121
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60

taatagcgat ggcgttattg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct 120

gggcgcaagc ggcagaggct cagtttcaag cattgcacgg ggcctggaat gggcagcaga 180

taatggcatg catgttgcaa atctgtcact gggctcagat caactgtcaa caacactgga 240

acgggcagtt aatcaagcaa catcacgggg cgttctggtt gttgcagcat caggcaataa 300

cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagctcttc acaatatggc acaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca tcaccgcatg tcgcaggcgt tgcagcacta gt 522

<210> 122
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 122
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacagttg cagcactgaa 60

taatagcatt ggcgttcttg gcgttgcacc gagcgctgaa ctgtatgcag ttaaagttct 120

gggcgcaagc ggcagaggct cagtttcagg cattgcacag ggcctggaat gggcaggaac 180

aaatggcatg catgttgcaa atatgtcact gggcacacct gcaccgtcag caacactgga 240

acaggcagtt aatgcagcaa catcacaggg cgttctggtt attgcagcat caggcaatag 300

cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atactgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcaa tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 123
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 123
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taataacatt ggcgttcttg gcgttgcacc gagcgttgaa ctgtatggag ttaaagttct 120

gggcgcaagc ggcagcggct cagtttcaag cattgcacag ggcctggaat gggcagcaga 180

taatggcatg catgttgcaa atatgtcact gggctcacct tttccgtcat caacactgga 240

acaggcagtt aattcagcaa catcacgggg cgttctggtt gttgcagcat caggcaatag 300

cggctcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 124
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 124
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60

taatagcatt ggcgttattg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct 120

gggcgcaagc ggcagcggct cagtttcaag cattgcacgg ggcctggaat gggcaggaga 180

taatggcatg catgttgcaa atctgtcact gggctcacct tcaccgtcag caacactgga 240

acaggcagtt aattcagcaa catcacgggg cgttctggtt attgcagcaa caggcaatac 300

cggcgcaggc acacttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc accggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgtttcac tgaacggcac 480

atcaatggca acaccgcatg ttgcaagcgc tgcagcacta gt 522

<210> 125
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 125
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60

taatagcgtt ggcgttcttg gcgttgcacc gaacgttgaa ctgtatgcag ttaaagttct 120

gggcgcaagc ggcagaggca caatttcagg cattgcacag ggcctggaat gggcagcaga 180

taatggcacg catattgcaa atctgtcact gggcacatct ttccgtcag caacactgga 240

acgggcagtt aattcagcaa catcacgggg cgttctggtt gttgcagcaa caggcaatac 300

cggcgcaggc tcaattagct atccggcaag atttgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgg 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac 480

atcaatggca acaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 126
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 126
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taatagcgat ggcgttattg gcgttgcacc gagcgctgat ctgtatgcag ttaaagttct 120

gggcgcaaac ggcagcggct cagtttcaag cattgcacag ggcctggaat gggcagcaga 180

taatggcatg catattgcaa atatgtcact gggcacatct tcaccgtcag taacactgga 240

acgggcagtt aatgcagcaa catcacaggg cgttctggtt gttgcagcat caggcaatac 300

cggcgcaggc tcaattggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aatagaagag caagcttttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt aatgttcaat caacatatcc gggcagcaga tatgcttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 127
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 127
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taatagcatt ggcgttattg gcgttgcacc gagcgctgaa ctgtatggag ttaaagttct 120

gggcgcaaac ggcagcggct cggtttcaag cattgcacgg ggcctggaat gggcaggaaa 180

taatggcatg catattgcaa atctgtcact gggctcagat tttccgtcag caacactgga 240

acaggcagtt aatgcagcaa catcacgggg cgttctggtt gttgcagcat caggcaataa 300

cggctcaggc tcagttggct atccggcaag atatgcaaat gcaatgggag ttggcgcaac 360

agatcaaaat aatagaagag caaacttttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcaacaca tatgtttcac tgaacggcac 480

atcaatggca acaccacatg ttgcgggcgt tgcagcacta gt 522

<210> 128
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 128
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taatagcgat ggcgttattg gcgttgcacc gaacgttgaa ctgtatggag ttaaagttct 120

gggcgcaaac ggcagaggca cagtttcagg cattgcacag ggcctggaat gggcagcagc 180

aaatggcatg catgttgcaa atctgtcact gggctcacct gcaccgtcag caacactgga 240

acaggcagtt aatgcagcaa catcacgggg cgttctggtt attgcagcat caggcaatag 300

cggcgcaggc acagttggct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caaacttttc acagtatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcaacaca tatacttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 129
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 129
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60

taataacgtt ggcgttcttg gcgttgcacc gagcgttgat ctgtatggag ttaaagttct 120

ggacgcaagc ggcagaggca caatttcagg cattgcacgg ggcctggaat gggcagcagc 180

aaatggcatg catattgcaa atatgtcact gggctcagat caaccgtcaa caacactgga 240

acgggcagtt aatgcagcaa catcacgggg cgttctggtt gttgcagcat caggcaatac 300

cggctcaggc acagttagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caaactcttc acaatatggc gcaggccttg atattgttgc 420

accgggcgtt ggcgttcaat caacatatcc gggcagcaca tatgcttcac tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgt tgcagcacta gt 522

<210> 130
<211> 522
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 130
gtcgacacaa gatggcaatg gacatggcac acatgttgca ggcacaattg cagcactgaa 60

taatagcgtt ggcgttattg gcgttgcacc gagcgctgaa ctgtatggag ttaaagttct 120

gggcgcaaac ggcagcggca cagtttcagg cattgcacgg ggcctggaat gggcagcaga 180

taatggcatg catgttgcaa atatgtcact gggctcatct gcaccgtcag caacactgga 240

acgggcagtt aattcagcaa catcacgggg cgttctggtt gttgcagcaa caggcaatag 300

cggcgcaggc tcaattagct atccggcaag atatgcaaat gcaatggcag ttggcgcaac 360

agatcaaaat aataatagag caagcttttc acaatatggc acaggccttg atattgttgc 420

accgggcgtt aatgttcaat caacatatcc gggcagcaga tatgcttcaa tgagcggcac 480

atcaatggca tcaccgcatg ttgcaggcgc tgcagcacta gt 522

<210> 131
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 131

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 132
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 132

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 133
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 133

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 134
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 134

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Gly
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 135
<211> 172
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 135

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 136

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 136

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Gly Asn Asn Gly Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 137
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 137

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 138
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

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<223> Xaa in position 20 denotes an unknown amino acid

<400> 138

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Xaa Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 139
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 139

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Thr Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 140
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 140

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 141
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 141

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 142
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 142

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 143
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 143

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 144
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 144

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val

35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 145
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 145

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 146
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 146

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 147
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 147

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asp Asn Ser Val Gly Val Leu Gly Val Ala Pro Glu Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 148
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 148

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala

85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 149
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 149

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 150
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 150

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Arg Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 151
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 151

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 152
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 152

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
        35   40   45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 153
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 153

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 154
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 154

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Asp Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 155
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 155

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Gly Gln Tyr Ala Glu Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

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<210>  156
<211>  173
<212>  PRT
<213>  Artificial Sequence

<220>
<223>  Synthetic

<400>  156

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1               5                   10                  15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
            20                  25                  30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
        35                  40                  45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50                  55                  60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65                  70                  75                  80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85                  90                  95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100                 105                 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115                 120                 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Glu
    130                 135                 140

Ile Glu Ser Thr Tyr Pro Gly Ser Ser Tyr Asp Ser Leu Arg Gly Thr
145                 150                 155                 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165                 170


<210>  157
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<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 157

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 158
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 158

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 159
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 159

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Lys
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 160
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 160

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 161
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 161

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 162
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 162

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asp Asn Asp Glu Gly Val Val Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Ser Ala Ser Gly Ala Gly Ser Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ser Gly Glu Asn Gly Met Asp
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 163
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 163

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile

35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Gly Asn Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 164
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 164

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 165
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 165

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 166
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 166

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 167
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 167

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Ala Ser Arg Gly Val Leu Val Val Ala Ala

85 90 95

Ser Gly Asn Asn Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 168
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 168

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 169
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 169

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 170
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 170

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Thr Ala Asp Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ser Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 171
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 171

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser His Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 172
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 172

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Thr Asn Asn Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser His Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 173
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 173

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Arg Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 174
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 174

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Thr Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 175
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 175

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Thr Pro Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Lys Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Lys Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 176

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 176

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 177
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 177

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Glu Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 178
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 178

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Asn Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser His Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 179
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 179

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Met His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 180
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 180

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 181
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 181

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Lys Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Ser Ser Pro Ser Thr Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 182
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 182

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val

35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Ala Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 183
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 183

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Phe Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
35 40 45

Ser Ser Val Ala Gln Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Thr Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 184
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 184

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Thr His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 185
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 185

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Thr Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 186
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 186

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Ile Gly Val Ala Pro Asn Val
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Leu Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 187
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 187

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Met Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 188
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 188

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Asp Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 189
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 189

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Thr Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Phe Ser His Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 190
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 190

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Asp Asn Gly Thr His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Gly Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 191
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 191

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 192
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 192

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ser Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Ala Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 193
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 193

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 194
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 194

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Asp Ala Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 195

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 195

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Ser Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 196
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 196

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 197
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 197

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 198
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 198

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Thr Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 199
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 199

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 200
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 200

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Lys Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 201
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 201

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile

35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Cys Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 202
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 202

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 203
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 203

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Asp Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Thr Pro Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Leu Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 204
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 204

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Val Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asn Asn Asn Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 205
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 205

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85 90 95

Thr Gly Asn Thr Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 206
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 206

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 207
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 207

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 208
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 208

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
        35   40   45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Thr Asn Gly Thr His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ser Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Cys Pro Gly Asn Arg Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 209
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 209

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Gly Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 210
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 210

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Leu Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 211
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 211

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 212
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 212

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Gly Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Thr Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 213
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 213

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Glu Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 214

<211>   173
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   Synthetic

<400>   214

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Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1               5                   10                  15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
            20                  25                  30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
        35                  40                  45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
    50                  55                  60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Phe Pro Ser Ala Thr Leu Glu
65                  70                  75                  80

Gln Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85                  90                  95

Thr Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100                 105                 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115                 120                 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130                 135                 140

Val Gln Ser Thr Tyr Thr Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145                 150                 155                 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165                 170
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<210>   215
<211>   173
<212>   PRT
<213>   Artificial Sequence

<220>
<223> Synthetic

<400> 215

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Gly Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Thr Gly Asn Arg Tyr Val Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 216
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 216

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Ala Gly Val Leu Gly Val Ala Pro Asn Val
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Val Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Phe Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 217
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 217

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 218
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 218

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Thr Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 219
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 219

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 220
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 220

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Asp Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile

35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 221
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 221

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Ile Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 222
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 222

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Arg
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 223
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 223

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Gln Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 224
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 224

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Glu Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 225
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 225

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Asp Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Val Ala Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 226
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 226

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Thr Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 227
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 227

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Ser Val Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 228
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 228

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Ala
            20   25   30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Thr Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Thr Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Thr Gly Ser Arg Tyr Ala Leu Met Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 229
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 229

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Val Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 230
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 230

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Asn Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Ser Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Lys Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ala Gly Thr Ile Cys Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 231
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 231

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Ile Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 232
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 232

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Asn Gly Ser Gly Thr Val Gly Tyr Pro Ala Thr Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Thr Gly Asn Arg Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 233

<211>   173
<212>   PRT
<213>   Artificial Sequence

<220>
<223>   Synthetic

<400>   233

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Thr Asp Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210>   234
<211>   173
<212>   PRT
<213>   Artificial Sequence

<220>
<223> Synthetic

<400> 234

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 235
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 235

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Asn Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Thr Pro Ser Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Asp Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Gly Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 236
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 236

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Thr Pro Ser Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Ser Gly Ser Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 237
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 237

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Gln Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Gly Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Val Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 238
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 238

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Pro Ala Pro Ser Ser Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 239
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 239

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val

35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 240
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 240

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Gln Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Met Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 241
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 241

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Ile Gly Val Ala Pro Ser Val
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Gln Trp Ala Ala Ala Asn Gly Met His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Ser Ser Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
        115   120   125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 242
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 242

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Thr Ile Gly Tyr Pro Ala Thr Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Met Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 243
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 243

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Thr Ser Gly Ser Gly Thr Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Ser Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala

85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Lys Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 244
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 244

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Asp Phe Pro Ser Ser Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Val Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 245
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 245

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Thr Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Pro Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ser Gly Thr Ile Ala Tyr Pro Ala Arg Tyr Pro
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Gln Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 246
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 246

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Val
        35   40   45

Ser Ser Ile Ala Gln Gly Leu Leu Trp Ala Ala Asn Asn Gly Thr His
    50   55   60

Val Ala Asn Met Ser Leu Gly Ser Ser Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Thr Ile Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Ile Asp Ile Val Ala Pro Gly Val Asn
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 247
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 247

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asn Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ala Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln His Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly

130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 248
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 248

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Ser Gly Thr Ile
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asn Asn Gly Thr His
50 55 60

Val Ala Asn Leu Ser Leu Gly Thr Ser Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Thr Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 249
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 249

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Ile
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Asp Gln Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Thr Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 250
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 250

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Asn Asp Gly Val Leu Gly Val Ala Pro Asn Val
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Gly Ala Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Asn Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 251
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 251

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Asp Gln Leu Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Gln Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Ser Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 252

<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 252

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Ser Val
35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Gly Thr Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Thr Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Thr Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 253
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 253

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Asn Ile Gly Val Leu Gly Val Ala Pro Ser Val
            20   25   30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
        35   40   45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
    50   55   60

Val Ala Asn Met Ser Leu Gly Ser Pro Phe Pro Ser Ser Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Ser Gly Asn Ser Gly Ser Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
                165   170

<210> 254
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 254

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Val
            20   25   30

Asp Leu Tyr Gly Val Lys Val Leu Gly Ala Ser Gly Ser Gly Ser Val
        35   40   45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asp Asn Gly Met His
    50   55   60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ser Pro Ser Ala Thr Leu Glu
65   70   75   80

Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Thr Gly Ala Gly Thr Leu Ser Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Val Ser Leu Asn Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Ser Ala Ala Ala Leu
                165   170

<210> 255
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 255

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1   5   10   15

Ala Ala Leu Asn Asn Ser Val Gly Val Leu Gly Val Ala Pro Asn Val
            20   25   30

Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser Gly Arg Gly Thr Ile
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Thr His
    50   55   60

Ile Ala Asn Leu Ser Leu Gly Thr Ser Phe Pro Ser Ala Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
                85   90   95

Thr Gly Asn Thr Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Phe Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
        115   120   125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Gly Pro Gly Val Gly
    130   135   140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145   150   155   160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu
                165   170

<210> 256
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 256

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Thr Ser Ser Pro Ser Val Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Gln Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ala Gly Ser Ile Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 257
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 257

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Ser Val
35 40 45

Ser Ser Ile Ala Arg Gly Leu Glu Trp Ala Gly Asn Asn Gly Met His
50 55 60

Ile Ala Asn Leu Ser Leu Gly Ser Asp Phe Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Gly Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Val Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 258
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 258

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1 5 10 15

Ala Ala Leu Asn Asn Ser Asp Gly Val Ile Gly Val Ala Pro Asn Val
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Arg Gly Thr Val

35 40 45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Val Ala Asn Leu Ser Leu Gly Ser Pro Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Gln Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Ile Ala Ala
85 90 95

Ser Gly Asn Ser Gly Ala Gly Thr Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Thr Tyr Thr Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 259
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 259

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Asn Val Gly Val Leu Gly Val Ala Pro Ser Val
20 25 30

Asp Leu Tyr Gly Val Lys Val Leu Asp Ala Ser Gly Arg Gly Thr Ile
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Ala Asn Gly Met His
50 55 60

Ile Ala Asn Met Ser Leu Gly Ser Asp Gln Pro Ser Thr Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ala Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Ser Gly Asn Thr Gly Ser Gly Thr Val Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Asn
115 120 125

Ser Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val Ala Pro Gly Val Gly
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala Ser Leu Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Val Ala Ala Leu
165 170

<210> 260
<211> 173
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 260

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Ile
1 5 10 15

Ala Ala Leu Asn Asn Ser Val Gly Val Ile Gly Val Ala Pro Ser Ala
20 25 30

Glu Leu Tyr Gly Val Lys Val Leu Gly Ala Asn Gly Ser Gly Thr Val
35 40 45

Ser Gly Ile Ala Arg Gly Leu Glu Trp Ala Ala Asp Asn Gly Met His
50 55 60

Val Ala Asn Met Ser Leu Gly Ser Ser Ala Pro Ser Ala Thr Leu Glu
65 70 75 80

Arg Ala Val Asn Ser Ala Thr Ser Arg Gly Val Leu Val Val Ala Ala
85 90 95

Thr Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Asn Arg Ala Ser
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Leu Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Ser Arg Tyr Ala Ser Met Ser Gly Thr
145 150 155 160

Ser Met Ala Ser Pro His Val Ala Gly Ala Ala Ala Leu
165 170

<210> 261
<211> 380
<212> PRT
<213> Bacillus

<400> 261

Met Lys Lys Pro Leu Gly Lys Ile Val Ala Ser Thr Ala Leu Leu Ile
1 5 10 15

Ser Val Ala Phe Ser Ser Ser Ile Ala Ser Ala Ala Glu Glu Ala Lys
20 25 30

Glu Lys Tyr Leu Ile Gly Phe Asn Glu Gln Glu Ala Val Ser Glu Phe
35 40 45

Val Glu Gln Val Glu Ala Asn Asp Glu Val Ala Ile Leu Ser Glu Glu
50 55 60

Glu Glu Val Glu Ile Glu Leu Leu His Glu Phe Glu Thr Ile Pro Val
65 70 75 80

Leu Ser Val Glu Leu Ser Pro Glu Asp Val Asp Ala Leu Glu Leu Asp

85 90 95

Pro Ala Ile Ser Tyr Ile Glu Glu Asp Ala Glu Val Thr Thr Met Ala
100 105 110

Gln Ser Val Pro Trp Gly Ile Ser Arg Val Gln Ala Pro Ala Ala His
115 120 125

Asn Arg Gly Leu Thr Gly Ser Gly Val Lys Val Ala Val Leu Asp Thr
130 135 140

Gly Ile Ser Thr His Pro Asp Leu Asn Ile Arg Gly Gly Ala Ser Phe
145 150 155 160

Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly His Gly Thr His
165 170 175

Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile Gly Val Leu Gly
180 185 190

Val Ala Pro Ser Ala Glu Leu Tyr Ala Val Lys Val Leu Gly Ala Ser
195 200 205

Gly Ser Gly Ser Val Ser Ser Ile Ala Gln Gly Leu Glu Trp Ala Gly
210 215 220

Asn Asn Gly Thr His Val Ala Asn Leu Ser Leu Gly Ser Pro Ser Pro
225 230 235 240

Ser Ala Thr Leu Glu Gln Ala Val Asn Ser Ala Thr Ser Arg Gly Val
245 250 255

Leu Val Val Ala Ala Ser Gly Asn Ser Gly Ala Gly Ser Ile Ser Tyr
260 265 270

Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn
275 280 285

Asn Asn Arg Ala Ser Phe Ser Gln Tyr Gly Ala Gly Leu Asp Ile Val
290 295 300

Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly Ser Thr Tyr Ala
305 310 315 320

Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val Ala Gly Val Ala
                325   330   335

Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn Val Gln Ile Arg
            340   345   350

Asn His Leu Lys Asn Thr Ala Thr Ser Leu Gly Ser Thr Asn Leu Tyr
        355   360   365

Gly Ser Gly Leu Val Asn Ala Glu Ala Ala Thr Arg
    370   375   380

<210> 262
<211> 173
<212> PRT
<213> Artificial Sequence

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<220>
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<223> Xaa denotes Ile or Val

<220>
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<222> (20)..(20)
<223> Xaa denotes Asp or Asn

<220>
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<222> (22)..(22)
<223> Xaa denotes Asp, Ser, or Asn

<220>
<221> misc_feature
<222> (23)..(23)
<223> Xaa denotes Ile, Val or Glu

<220>
<221> misc_feature
<222> (26)..(26)
<223> Xaa denotes Ile, Val or Leu

<220>

<221> misc_feature
<222> (31)..(31)
<223> Xaa denotes Asn, Glu, or Ser

<220>
<221> misc_feature
<222> (32)..(32)
<223> Xaa denotes Ala or Val

<220>
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<222> (33)..(33)
<223> Xaa denotes Asp or Glu,

<220>
<221> misc_feature
<222> (36)..(36)
<223> Xaa denotes Ala or Gly

<220>
<221> misc_feature
<222> (41)..(41)
<223> Xaa denotes Gly, Ser or Arg

<220>
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<222> (43)..(43)
<223> Xaa denotes Ser or Asn

<220>
<221> misc_feature
<222> (45)..(45)
<223> Xaa denotes Ser, Ala or Arg

<220>
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<222> (48)..(48)
<223> Xaa denotes Ile or Val

<220>
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<222> (50)..(50)
<223> Xaa denotes Gly or Ser

<220>
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<222> (53)..(53)
<223> Xaa denotes Arg or Gln

<220>
<221> misc_feature
<222> (56)..(56)
<223> Xaa denotes Glu or Gln

<220>
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<222> (58)..(58)
<223> Xaa denotes Ala or Ser

<220>
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<222> (59)..(59)
<223> Xaa denotes Gly or Ala

<220>
<221> misc_feature
<222> (60)..(60)
<223> Xaa denotes Glu, Ala, Thr, or Asn

<220>
<221> misc_feature
<222> (62)..(62)
<223> Xaa denotes Gly or Asn

<220>
<221> misc_feature
<222> (64)..(64)
<223> Xaa denotes Asp or His

<220>
<221> misc_feature
<222> (68)..(68)
<223> Xaa denotes Leu or Met

<220>
<221> misc_feature
<222> (72)..(72)
<223> Xaa denotes Ser or Thr

<220>
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<222> (73)..(73)
<223> Xaa denotes Ser or Asp

<220>

<221> misc_feature
<222> (74)..(74)
<223> Xaa denotes Ala or Phe

<220>
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<222> (77)..(77)
<223> Xaa denotes Ala, Thr, or Ser

<220>
<221> misc_feature
<222> (80)..(80)
<223> Xaa denotes Glu, Lys, or Gly

<220>
<221> misc_feature
<222> (81)..(81)
<223> Xaa denotes Gln or Arg

<220>
<221> misc_feature
<222> (85)..(85)
<223> Xaa denotes Ala or Tyr

<220>
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<222> (89)..(89)
<223> Xaa denotes Arg or Gln

<220>
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<222> (90)..(90)
<223> Xaa denotes Asp or Gly

<220>
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<222> (97)..(97)
<223> Xaa denotes Ser or Thr

<220>
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<222> (100)..(100)
<223> Xaa denotes Ser or Asn

<220>
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<222> (102)..(102)
<223> Xaa denotes Ala or Ser

<220>
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<222> (125)..(125)
<223> Xaa denotes Asn or Arg

<220>
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<222> (128)..(128)
<223> Xaa denotes Ser or Asn

<220>
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<222> (134)..(134)
<223> Xaa denotes Ala or Thr

<220>
<221> misc_feature
<222> (136)..(136)
<223> Xaa denotes Leu or Ile

<220>
<221> misc_feature
<222> (144)..(144)
<223> Xaa denotes Gly, Arg, or Asn

<220>
<221> misc_feature
<222> (145)..(145)
<223> Xaa denotes Val or Leu

<220>
<221> misc_feature
<222> (146)..(146)
<223> Xaa denotes Gln or Arg

<220>
<221> misc_feature
<222> (152)..(152)
<223> Xaa denotes Gly, Asn, Ser, or Thr

<220>
<221> misc_feature
<222> (153)..(153)
<223> Xaa denotes Arg, Ser, Thr, or Gln

<220>

<221> misc_feature
<222> (155)..(155)
<223> Xaa denotes Val, Ala, or Asp

<220>
<221> misc_feature
<222> (156)..(156)
<223> Xaa denotes Glu, Arg, or Ser

<220>
<221> misc_feature
<222> (157)..(157)
<223> Xaa denotes Leu or Met

<220>
<221> misc_feature
<222> (158)..(158)
<223> Xaa denotes Asn, Ser , or Arg

<220>
<221> misc_feature
<222> (164)..(164)
<223> Xaa denotes Ser or Thr

<220>
<221> misc_feature
<222> (170)..(170)
<223> Xaa denotes Ala or Val

<400> 262

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Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Xaa
1               5                   10                  15

Ala Ala Leu Xaa Asn Xaa Xaa Gly Val Xaa Gly Val Ala Pro Xaa Xaa
            20                  25                  30

Xaa Leu Tyr Xaa Val Lys Val Leu Xaa Ala Xaa Gly Xaa Gly Ser Xaa
        35                  40                  45

Ser Xaa Ile Ala Xaa Gly Leu Xaa Trp Xaa Xaa Xaa Asn Xaa Met Xaa
    50                  55                  60

Ile Ala Asn Xaa Ser Leu Gly Xaa Xaa Xaa Pro Ser Xaa Thr Leu Xaa
65                  70                  75                  80
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Xaa Ala Val Asn Xaa Ala Thr Ser Xaa Xaa Val Leu Val Ile Ala Ala
85 90 95

Xaa Gly Asn Xaa Gly Xaa Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
100 105 110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Xaa Arg Ala Xaa
115 120 125

Phe Ser Gln Tyr Gly Xaa Gly Xaa Asp Ile Val Ala Pro Gly Val Xaa
130 135 140

Xaa Xaa Ser Thr Tyr Pro Gly Xaa Xaa Tyr Xaa Xaa Xaa Xaa Gly Thr
145 150 155 160

Ser Met Ala Xaa Pro His Val Ala Gly Xaa Ala Ala Leu
165 170

<210> 263
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 263
agtacccagg acgga 15

<210> 264
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 264

Ala Ala Leu Asn Asn Ser Ile Gly Val Leu
1 5 10

<210> 265
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 265

Ala Ala Leu Gln Asn Ala Leu Gly Val Val
1   5   10

<210> 266
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 266

Ala Ala Leu Gln Asn Thr Val Gly Val Met
1   5   10

<210> 267
<211> 175
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 267

Ser Thr Gln Asp Gly Asn Gly His Gly Thr His Val Ala Gly Thr Val
1   5   10   15

Ala Ala Leu Asn Asn Ser Ile Gly Val Ile Gly Val Ala Pro Ser Ala
            20   25   30

Asp Leu Tyr Ala Val Lys Val Leu Gly Ala Asn Gly Arg Gly Ser Val
        35   40   45

Ser Gly Ile Ala Gln Gly Leu Glu Trp Ala Ala Ala Asn Asn Met His
    50   55   60

Ile Ala Asn Met Ser Leu Gly Ser Asp Ala Pro Ser Thr Thr Leu Glu
65   70   75   80

Arg Ala Val Asn Tyr Ala Thr Ser Gln Gly Val Leu Val Ile Ala Ala
                85   90   95

Thr Gly Asn Asn Gly Ser Gly Ser Val Gly Tyr Pro Ala Arg Tyr Ala
            100   105   110

Asn Ala Met Ala Val Gly Ala Thr Asp Gln Asn Asn Arg Arg Ala Asn
115 120 125

Phe Ser Gln Tyr Gly Thr Gly Ile Asp Ile Val Ala Pro Gly Val Asn
130 135 140

Val Gln Ser Thr Tyr Pro Gly Asn Arg Tyr Ala Ser Leu Asn Gly Thr
145 150 155 160

Ser Met Ala Thr Pro His Val Ala Gly Ala Ala Ala Leu Val Lys
165 170 175

<210> 268
<211> 193
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 268

Gly Ala Ser Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly
1 5 10 15

His Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asp Asn Ser Glu
20 25 30

Gly Val Leu Gly Val Ala Pro Asn Ala Asp Leu Tyr Ala Val Lys Val
35 40 45

Leu Gly Ala Ser Gly Ser Gly Ser Ile Ser Gly Ile Ala Gln Gly Leu
50 55 60

Glu Trp Ala Gly Glu Asn Gly Met His Ile Ala Asn Leu Ser Leu Gly
65 70 75 80

Ser Ser Ala Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Tyr Ala Thr
85 90 95

Ser Gln Gly Val Leu Val Ile Ala Ala Ser Gly Asn Ser Gly Ala Gly
100 105 110

Ser Val Gly Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala

115 120 125

Thr Asp Gln Asn Asn Asn Arg Ala Ser Phe Ser Gln Tyr Gly Ala Gly
130 135 140

Leu Asp Ile Val Ala Pro Gly Val Gly Val Gln Ser Thr Tyr Pro Gly
145 150 155 160

Asn Arg Tyr Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val
165 170 175

Ala Gly Val Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn
180 185 190

Val

<210> 269
<211> 193
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetic

<400> 269

Gly Ala Ser Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly
1 5 10 15

His Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile
20 25 30

Gly Val Leu Gly Val Ala Pro Asn Ala Asp Leu Tyr Ala Val Lys Val
35 40 45

Leu Gly Ala Asn Gly Ser Gly Ser Val Ser Gly Ile Ala Gln Gly Leu
50 55 60

Glu Trp Ala Ala Ala Asn Asn Met His Ile Ala Asn Met Ser Leu Gly
65 70 75 80

Ser Asp Ala Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Tyr Ala Thr
85 90 95

Ser Arg Gly Val Leu Val Ile Ala Ala Thr Gly Asn Asn Gly Ser Gly
100 105 110

Ser Val Gly Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala
115 120 125

Thr Asp Gln Asn Asn Arg Arg Ala Asn Phe Ser Gln Tyr Gly Thr Gly
130 135 140

Ile Asp Ile Val Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly
145 150 155 160

Asn Arg Tyr Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val
165 170 175

Ala Gly Val Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn
180 185 190

Val

<210> 270
<211> 193
<212> PRT
<213> Bacillus

<400> 270

Gly Ala Ser Phe Val Pro Gly Glu Pro Ser Thr Gln Asp Gly Asn Gly
1 5 10 15

His Gly Thr His Val Ala Gly Thr Ile Ala Ala Leu Asn Asn Ser Ile
20 25 30

Gly Val Leu Gly Val Ala Pro Ser Ala Glu Leu Tyr Ala Val Lys Val
35 40 45

Leu Gly Ala Ser Gly Ser Gly Ser Val Ser Ser Ile Ala Gln Gly Leu
50 55 60

Glu Trp Ala Gly Asn Asn Gly Met His Val Ala Asn Leu Ser Leu Gly
65 70 75 80

Ser Pro Ser Pro Ser Ala Thr Leu Glu Gln Ala Val Asn Ser Ala Thr
85 90 95

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Ser Arg Gly Val Leu Val Val Ala Ala Ser Gly Asn Ser Gly Ala Gly
            100                 105                 110

Ser Ile Ser Tyr Pro Ala Arg Tyr Ala Asn Ala Met Ala Val Gly Ala
        115                 120                 125

Thr Asp Gln Asn Asn Asn Arg Ala Ser Phe Ser Gln Tyr Gly Ala Gly
    130                 135                 140

Leu Asp Ile Val Ala Pro Gly Val Asn Val Gln Ser Thr Tyr Pro Gly
145                 150                 155                 160

Ser Thr Tyr Ala Ser Leu Asn Gly Thr Ser Met Ala Thr Pro His Val
                165                 170                 175

Ala Gly Ala Ala Ala Leu Val Lys Gln Lys Asn Pro Ser Trp Ser Asn
            180                 185                 190

Val
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